

TECHNICAL DATA SHEET

FORTIS AD5113 – Laminating Adhesive

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INTRODUCTION

FORTIS AD5113 – Laminating Adhesive

Fortis AD5113 is a single pack sprayable, solvent borne, flexible polyurethane.

USE

It is suitable for bonding a wide range of substrates including polystyrene foam, timber, plastic and various metallic and Colorbond® surfaces. It has been designed for bonding polystyrene foam to a wide variety of flexible and rigid facing materials in the manufacture of insulation and structural sandwich panels.

FEATURES

The adhesive system is moisture cured and hence the cure rate is related to the prevailing relative humidity and temperature of the substrates and the atmosphere. **Fortis AD5113** is supplied as precatylsed to a moderate level suitable for warm climatic conditions. Cure time can be reduced significantly by use of a hot press.

Fortis AD5113 cures to a tough flexible film and hence can be used for flexible film and rigid substrates. It has been specifically designed to allow some initial slip after lamination to aid in the ready alignment of assemblies.

TECHNICAL DATA

Colour	Red
Coverage Rate	100 - 200 gsm
Solids	50-60%
Viscosity	< 300 mPas
Specific Gravity	1.17
Boiling Point	40°C (Solvent)
Solvent	Predominantly methylene chloride
Flammability	Non-flammable
Pack Size	22kg pails and 240kg drums
Shelf Life & Storage	Store in a cool, dry place. Under normal conditions (20 - 25oC) a shelf life of 12 months is expected in unopened containers. (Please see further info below for storage of this product).

APPLICATION

APPLICATION INSTRUCTIONS

The adhesive is designed for spray application at a rate of 100 – 200 gsm to one surface of the glue line. Airless spray with a pump of ratio of 30:1 and a fluid pressure of 8 – 17MPa (1200 – 2500 psi) is recommended. An air assisted spray gun can also be advantageous. Spray tips which give a wide spray area and of relative large diameter (0.017" - 0.025") are recommended. The adhesive is particularly suitable for high speed lamination as the methylene chloride based solvent system ensures solvent retention is minimised. Where very rapid assembly is required, the coated panels should be passed under infra-red or hot air heaters prior to assembly. It is generally recommended that panels can be assembled within 10 minutes although under normal temperatures and humidity good adhesion can be obtained after at least 15 minutes open time. Pressing of the assemblies is recommended to ensure intimate contact. Low pressures (28 - 70 kPa ie. 4 - 10 psi) are generally all that is required. Cure can be greatly accelerated by a hot press where excellent bonds can be achieved within 12 minutes at 50oC compared with 1 - 1.5 hours at ambient temperatures.

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CLEAN UP

Moisture can permeate into spray equipment in time, particularly when the equipment is not being used. This may cause the adhesive to gel and subsequent line blockage. It is recommended that the equipment be thoroughly cleaned whenever the line is to be shut for a period of time. Providing moisture impervious lines such as Teflon are utilised the adhesive can be left in the sealed system for longer periods of time. The lines should be flushed with a suitable solvent such as methylene chloride, leaving the spraying system full of solvent.

STORAGE

Store in a cool, dry place. Under normal conditions (20 - 25oC) a shelf life of 12 months is expected in unopened containers. Partially used containers should be purged with dry nitrogen to prolong storage stability as the material will skin in 1 - 2 hours if left in contact with humid air. If contact with moisture or water occurs, the drums should not be resealed. Reaction with water leads to gas evolution, with possible pressure build-up. Preferably part-used containers should be purged with dry nitrogen for maximum storage stability. In properly sealed full containers a shelf-life of at least twelve months can be achieved at normal catalyst levels.

SAFETY

Refer to Fortis Safety Data Sheets for individual products. **Fortis AD 5113** is safe if safe working should be worn when handling the adhesive. This product contains only diphenylmethane diisocyanate derived polymers. Further information on handling isocyanate

Note: Do not use through application equipment made of aluminium. **Fortis AD 5113** contains chlorinated solvents.

Experience has shown that under certain conditions reaction between the solvents and aluminium components may occur.

With the high pressures used in this type of equipment the results can be devastating. All components in contact with the adhesive should be made of stainless steel. Graco and Binks can supply suitable pump units.

Disclaimer

Fortis products should be used in accordance with the information contained here. Each user should read and consider this information carefully in the context of how the products will be handled and used in the workplace including in conjunction with other products. While the information contained here is to the best of our knowledge at the date of publication, Fortis makes no representation about the accuracy of the information. If you need clarification or more information, you should contact Fortis Adhesives & Coatings office directly. Fortis products are sold without express or implied warranties, other than as provided by statute, and subject to our standard terms and conditions (provided to customers and available on request). Subject to our standard terms and conditions, and any statutory provisions, Fortis accepts no responsibility (including in negligence) for loss or damage of any nature resulting from the use of Fortis Adhesives & Coatings products or reliance upon the information contained here